

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A connecting device for a medical system comprising:
 - a first subsystem having a first connection portion, and
 - a second subsystem having a second connection portion,
 - at least one of the first and second subsystems containing a fluid, the connecting device being configured to connect the first subsystem to the second subsystem to permit transport of the fluid from at least one of the first and second subsystems to the other of the first and second subsystems, the device comprising a container enclosing an inner space, the container being configured to receive the first connection portion and the second connection portion in the inner space, and a mechanism configured to permit, from outside the container, said connection of the first connection portion and the second connection portion to each other in the inner space and a disconnection of the first connection portion from the second connection portion after said connection has been accomplished, wherein the connecting device further comprises means for providing a substantially sterile atmosphere in the inner space, said means for providing a substantially sterile atmosphere comprising:
 - a channel permitting an inward flow of a gas into the inner space,
 - a filter arranged in said channel for filtering the gas before the gas enters the inner space, and

a flow generator for providing said inward flow of gas through the channel, said flow generator configured to supply said inward flow of gas at least during the connection of the first connection portion and the second connection portion and a disconnection of the first connection portion and the second connection portion, thereby enabling both the connection and the disconnection of the first and second connection portions to be performed in a substantially sterile atmosphere, wherein said flow generator includes a fan, the flow generator being configured to maintain an overpressure in the inner space of the container.

2-7. (Cancelled).

8. (Previously Presented) A device according to claim 1, wherein said means includes a disinfectant member for supplying a disinfectant agent into the inner space of the container.

9. (Previously Presented) A device according to claim 1, wherein at least one of the first connection portion and the second connection portion is associated with a protective end cap, said mechanism being arranged to permit removing of the protective end cap from the associated first or second connection portion prior to said connection of the first connection portion and the second connection portion to each other in the inner space.

10. (Previously Presented) A device according to claim 2, wherein the mechanism is arranged to permit attachment of a protective end cap to the associated connection portion after said disconnection.

11. (Previously Presented) A device according to claim 1, wherein the container is openable to an open state to give access to the inner space and to permit

the introduction of the first connection portion and the second connection portion in the inner space.

12. (Previously Presented) A device according to claim 11, wherein the container comprises a base member and an openable cover.

13. (Previously Presented) A device according to claim 1, wherein the device comprises:

a first receiving member arranged in the inner space for receiving and holding the first connection portion in an initial position; and

a second receiving member arranged in the inner space for receiving and holding the second connection portion in an initial position, said mechanism being configured to move at least one of the first receiving member and the second receiving member to cause the first connection portion and the second connection portion to be connected to each other in said inner space.

14. (Previously Presented) A device according to claim 1, wherein the first connection portion is associated with a first protective end cap for protecting the first connection portion, and the second connection portion is associated with a second protective end cap for protecting the second connection portion, said mechanism being arranged to permit removing of the first protective end cap from the first connection portion and the second protective end cap from the second connection portion prior to said connection of the first connection portion and the second connection portion to each other in the inner space.

15. (Previously Presented) A device according to claim 14, wherein the first receiving member is arranged to engage simultaneously the first connection portion and

the second protective end cap, and that the second receiving member is arranged to engage simultaneously the second connection portion and the first protective end cap.

16. (Previously Presented) A device according to claim 1, wherein the mechanism comprises a first maneuvering member and a second maneuvering member.

17. (Previously Presented) A device according to claim 15 or 16, wherein the first protective end cap is screwed onto the first connection portion and the second protective end cap is screwed onto the second connection portion, said second maneuvering member being arranged to rotate, at an initial position, one of the first protective end cap and the first connection portion to release the first protective end cap from the first connection portion, and one of the second protective end cap and the second connection portion to release the second protective end cap from the second connection portion.

18. (Previously Presented) A device according to claim 17, wherein the first maneuvering member is arranged to move, at the initial position, at least one of the first receiving member and the second receiving member away from each other for completing the removing of the first and second protective end caps from the respective first and second connection portions.

19. (Previously Presented) A device according to claim 18, wherein said moving of at least one of the first and second receiving members at the initial position comprises a movement along a substantially longitudinal primary direction.

20. (Previously Presented) A device according to claim 19, wherein the second maneuvering member is arranged to move one of the first receiving member and the second receiving member from the initial position to a connection position.

21. (Previously Presented) A device according to claim 20, wherein the second maneuvering member is arranged to perform said moving of one of the first and second receiving members to the connection position after said complete removing of the first and second protective end caps from the respective first and second connection portions.

22. (Previously Presented) A device according to claim 20, wherein said moving of one of the first and second receiving members to the connection position comprises a movement along a substantially longitudinal secondary direction.

23. (Previously Presented) A device according to claim 22, wherein said primary direction is substantially perpendicular to said secondary direction.

24. (Previously Presented) A device according to claim 23, wherein the first maneuvering member is arranged to move, at said connection position, at least one of the first receiving member and the second receiving member along a longitudinal direction being parallel to the primary direction in such a way that the first connection portion engages the second connection portion.

25. (Previously Presented) A device according to claim 24, wherein the second maneuvering member is arranged to rotate, after said moving at the connection position, one of the first connection portion and the second connection portion to secure the connection of the first connection portion to the second connection portion.

26. (Previously Presented) A device according to claim 16, wherein the first maneuvering member comprises a grip portion provided outside the container to be engageable by a person using the device.

27. (Previously Presented) A device according to claim 16, wherein the second maneuvering member comprises a handle provided outside the container to be engageable by a person using the device.

28. (Previously Presented) A device according to claim 1, wherein the first subsystem comprises a dialysis liquid container and the second subsystem comprises a catheter adapted to be operably partially disposed in a patient extending into the abdominal cavity, the catheter forming the second connection portion.

29. (Currently Amended) A medical system comprising:
a first subsystem having a first connection portion;
a second subsystem having a second connection portion, at least one of the first and second subsystems containing a fluid; and

a connecting device being adapted to connect the first and second subsystems to each other to permit transport of the fluid from at least one of the first and second subsystems to the other subsystem, the connecting device comprising a container enclosing an inner space, the container being adapted to receive the first connection portion and the second connection portion in the inner space, wherein the device comprises a mechanism adapted to permit, from outside the container, said connection of the first connection portion and the second connection portion to each other in the inner space and a disconnection of the first connection portion from the second connection portion after said connection has been accomplished, wherein the

connecting device further comprises means for providing a substantially sterile atmosphere in the inner space, said means for providing a substantially sterile atmosphere comprising:

- a channel permitting an inward flow of a gas into the inner space,
- a filter arranged in said channel for filtering the gas before the gas enters the inner space, and
- a flow generator for providing said inward flow of gas through the channel, said flow generator configured to supply said inward flow of gas at least during the connection of the first connection portion and the second connection portion and a disconnection of the first connection portion and the second connection portion, thereby enabling both the connection and the disconnection of the first and second connection portions to be performed in a substantially sterile atmosphere, wherein said flow generator includes a fan, the flow generator being configured to maintain an overpressure in the inner space of the container.

30. (Previously Presented) A medical system comprising:

- a first subsystem having a first connection portion;
- a second subsystem having a second connection portion, at least one of the first and second subsystems containing a fluid; and
- a connecting device being adapted to connect the first and second subsystems to each other to permit transport of the fluid from at least one of the first and second subsystems to the other subsystem, the connecting device comprising a container enclosing an inner space, and means for providing a substantially sterile atmosphere in the inner space, and the container being adapted to receive the first connection portion

and the second connection portion in the inner space, wherein the device comprises the features defined in claim 26.

31. (Previously Presented) A medical system according to claim 29, wherein the first subsystem comprises a dialysis liquid container and the second subsystem comprises a catheter adapted to be operably partially disposed in a patient extending into the abdominal cavity, the catheter forming the second connection portion.

32. (Previously Presented) A medical system according to claim 29 or 31, wherein the medical system is a system for peritoneal dialysis, for infusion of an infusion solution and/or for infusion of a blood product.

33. (Currently Amended) A method for connecting in a medical system a first subsystem, having a first connection portion, and a second subsystem, having a second connection portion, to each other, wherein at least one of the first and second subsystems contains a fluid, the method comprising the steps of:

- providing a container enclosing an inner space,
- providing a substantially sterile atmosphere in the inner space,
- providing, via a channel, an inward flow of a gas into the inner space, wherein said flow of gas is generated by a fan, the fan being configured to maintain an overpressure in the inner space of the container,

- filtering the gas before the gas enters the inner space,
- introducing the first connection portion and the second connection portion into the inner space, and

- connecting, from outside the container by means of a mechanism, the first connection portion and the second connection portion to each other in the inner space

to permit transport of the fluid from at least one of the first and second subsystems to the other subsystem, wherein providing an inward flow of gas into the inner space occurs at least during connecting the first connection portion and the second connection portion and disconnecting the first connection portion from the second connection portion, thereby enabling both connecting and disconnecting of the first and second connection portions to be performed in a substantially sterile atmosphere,

wherein the step of disconnecting comprises disconnecting, from outside the container by means of said mechanism, the first connection portion from the second connection portion after said connecting step.

34-37 (Cancelled).

38. (Previously Presented) A method according to claim 33, comprising the further step of:

supplying a disinfectant agent into the inner space.

39. (Previously Presented) A method according to claim 33, wherein at least one of the first connection portion and the second connection portion is associated with a protective end cap, the method comprising the further step of:

removing of the protective end cap from the associated first or second connection portion prior to said connecting step.

40. (Previously Presented) A method according to claim 39, comprising the further step of:

attaching the protective end cap to the associated first or second connection portion after said disconnecting step.

41. (Previously Presented) A method according to claim 33, comprising the further steps of:

opening the container;

introducing the first connection portion and the second connection portion in the inner space;

positioning the first and second connection portions in the inner space; and

closing the container.

42. (Previously Presented) A method according to claim 41, wherein said positioning comprises the sub-steps of:

positioning the first connection portion in a first receiving member in an initial position in the inner space; and

positioning the second connection portion in a second receiving member in an initial position in the inner space;

43. (Previously Presented) A method according to claim 42, wherein said connecting step comprises the sub-step of:

moving at least one of the first receiving member and the second receiving member to a connection position to complete said connecting step.

44. (Previously Presented) A method according to claim 33, wherein the first connection portion is associated with a first end cap for protecting the first connection portion, and the second connection portion is associated with a second end cap for protecting the second connection portion, the method comprising the step of: removing of the first end cap from the first connection portion and the second end cap from the second connection portion prior to said connecting step.

45. (Previously Presented) A method according to claim 44, wherein the first end cap is screwed onto the first connection portion and the second end cap is screwed onto the second connection portion, the method comprising the steps of:
rotating, at an initial position, one of the first end cap and the first connection portion to release the first end cap from the first connection portion;

rotating, at the initial position, one of the second end cap and the second connection portion to release the second end cap from the second connection portion;
and

moving, at the initial position, along a longitudinal primary direction, at least one of the first receiving member and the second receiving member away from each other for completing the removing of the first and second end caps from the respective first and second connection portions.

46. (Previously Presented) A method according to claim 45, further comprising the steps of:

moving along a longitudinal secondary direction at least one of the first and second receiving members from the initial position to a connection position after said complete removing of the first and second end caps from the respective first and second connection portions.

47. (Previously Presented) A method according to claim 46, further comprising the step of:

moving, at said connection position, at least one of the first receiving member and the second receiving member along a longitudinal direction being perpendicular to

the secondary direction in such a way that a first or second end portion engages the first connection portion.

48. (Previously Presented) A method according to claim 47, further comprising the step of:

rotating, after said step of moving at the connection position, one of the first receiving member and the second receiving member to secure the connection of the first connection portion to the second connection portion.

49. (Previously Presented) A method according to claim 33 or 48, wherein the first subsystem comprises a dialysis liquid container and the second subsystem comprises a catheter adapted to be operably partially disposed in a patient extending into the abdominal cavity, the catheter forming the second connection portion.

50. (Previously Presented) A method according to claim 49, wherein the medical system is a system for peritoneal dialysis, for infusion of an infusion solution or for infusion of a blood product.